U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FORM PTO-1390 TRANSMITTAL LETTER TO THE UNITED STATES NREL 02-09 DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO. (If known, see 37 CFR 1.5 CONCERNING A FILING UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US02/12576 19 April 2002 TITLE OF INVENTION FLUORESCENCE TECHNIQUE FOR ON-LINE MONITORING OF STATE OF HYDROGEN-PRODUCING MICROORGANISMS APPLICANT(S) FOR DO/EO/US MICHAEL SEIBERT, VALERIYA MAKAROVA, ANATOLY A. TSYGANKOV AND ANDREW B. RUBIN Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected by the expiration of 19 months from the priority date (Article 3 1). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 11. X

PUT

 14. A SECOND or SUBSEQUENT preliminary amendment. 15. A substitute specification. 16. A change of power of attorney and/or address letter. 17. A computer-readable form of the sequence listing in accordance with PCT Rule l3ter.2 and 35 U.S.C. 1.821 - 1.825 18. A second copy of the published international application under 35 U.S.C. 154(d)(4). 	13.	A FIRST preliminary amendment.
A change of power of attorney and/or address letter. A computer-readable form of the sequence listing in accordance with PCT Rule l3ter.2 and 35 U.S.C. 1.821 - 1.825	14.	A SECOND or SUBSEQUENT preliminary amendment.
17. A computer-readable form of the sequence listing in accordance with PCT Rule l3ter.2 and 35 U.S.C. 1.821 - 1.825	15.	A substitute specification.
	16.	A change of power of attorney and/or address letter.
18. A second copy of the published international application under 35 U.S.C. 154(d)(4).	17.	A computer-readable form of the sequence listing in accordance with PCT Rule l3ter.2 and 35 U.S.C. 1.821 - 1.825.
	18.	A second copy of the published international application under 35 U.S.C. 154(d)(4).

A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

20. Other items or information:

Post Card Receipt,

19.

12.

DT05 Rec'd PCT/PT0 1 8 OCT 2004

U.S. PPP CATION 5 (1/Lno 4. se O) CF2.59 INTERNATIONAL APPLICATION NO. PCT/US02/12576					attorney's docket number NREL 02-09			
21. The following	ng fees are subn	itted:			CA	LCULATIONS P	TO USE ONLY	
	21. The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):							
Neither internation	Neither international preliminary examination fee (37 CFR 1.482)							
nor international search fee (37 CFR 1.445(a)(2) paid to USPTO and International Search Report not prepare by the EPO or JPO \$1080.00								
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$920.00								
International prelin but international se	International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO							
International prelin but all claims did n	International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(l)-(4)							
International prelin	ninary examinati	on fee (3	7 CFR 1.482) paid to US	PTO				
			rticle 33(l)-(4)BASIC FEE AMO					
			•		\$	100.00		
Surcharge of \$130.0 months from the ear	0 for furnishing the liest claimed price	the oath ority date	or declaration later than (37 CFR 1.492(e)).	2030	s	0		
CLAIMS	NUMBER FIL	.ED	NUMBER EXTRA	RATE	S			
Total claims) =	0 .	x \$18.00	\$			
Independent claims	L	=	0 licable) 0	x \$86.00	\$ \$			
MULTIPLE DEPEN	`	/ 	F ABOVE CALCU	+ \$290.00 LATIONS =	S	100.00		
Applicant claim			37 CFR 1.27. The fees		l `	100.00		
Applicant claim are reduced by		aras. See		+	S	50.00		
			SI	UBTOTAL -	s	50.00		
Processing fee of \$1	30.00 for furnish	ing the E	inglish translation later th		s	,	,,,_	
months from the ear	liest claimed pric	ority date			<u> </u>			
	TOTAL NATIONAL FEE = \$							
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +								
			TOTAL FEES E	NCLOSED =	\$	50.00		
						ount to be refunded:	\$	
						charged:	\$ 50.00	
a. A check in the amount of \$to cover the above fees is enclosed.								
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b. Please char A duplicate	b. Please charge my Deposit Account No. <u>14-0460</u> in the amount of \$ 50.00 to cover the above fees. A duplicate copy of this sheet is enclosed.							
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0460 A duplicate copy of this sheet is enclosed.								
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card								
information should not be included on this form. Provide credit card information and authorization on PTO-2038.								
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.								
SEND ALL CORRESP	ONDENCE TO:	·		SIGNAT	URE	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ 	June	
Paul J. White						to		
Paul J. White Paul J. White National Renewable Energy Laboratory NAME						VVIIILE		
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Golden, CO 80)401			<u>30,43</u> 0 REGISTI		N NUMBER		

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PTO/SB/05 (09-04)

Approved use through 07/31/2006. OMB 0651-0032

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LITH ITV

Attorney Docket No.

UTILIT		Michael College					
PATENT APPLICATION	First Inventor Michael Seibert						
TRANSMITTAL	Title	Fluorescence Technique for On-Line					
(Only for new nonprovisional applications under 37 CFR 1.53(b))	Express Mail Label No.	EL 927021692 US					
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO:	Commissioner for Patents ESS TO: P.O. Box 1450 Alexandria VA 22313-1450					
1. Fee Transmittal Form (e.g., PTO/SB/17)	ACCOMPANYING APPLICATION PARTS						
(Submit an original and a duplicate for fee processing) 2. Applicant claims small entity status. See 37 CFR 1.27.	9. Assignment Papers (cover sheet & document(s))						
3. Specification [Total Pages] Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608.01(a))	Name of Assignee						
4. Drawing(s) (35 U.S.C. 113) [Total Sheets]							
5. Oath or Declaration [Total Sheets 3] a. Newly executed (original or copy)	10. 37 CFR 3.73(b) Statement Power of Attorney						
b. A copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S)	11. English Translation Document (if applicable)						
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).	12. Information Disclosure Statement (PTO/SB/08 or PTO-1449) Copies of citations attached						
6. Application Data Sheet. See 37 CFR 1.76	13. Preliminary Amendment						
7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) Landscape Table on CD	14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)						
Nucleotide and/or Amino Acid Sequence Submission (if applicable, items a. – c. are required) a. Computer Readable Form (CRF)	15. Certified Copy of Priority Document(s) (if foreign priority is claimed)						
b. Specification Sequence Listing on:	 Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent. 						
i.	17. Other:						
c. Statements verifying identity of above copies							
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:							
	tion-in-part (CIP) of prior application No.:						
Prior application information: Examiner	Art Unit:						
19. COFFE SHOULE AND RESS							
The address associated with Customer Number: 23712 PATENT A TRADEMARK OFFICE OR Correspondence address below							
Name Paul J. White, Senior Patent Counsel							
Address National Renewable Energy Laboratory, 1617 Co	ole Blvd.						
City Golden State	со	Zip Code 80401					
Country USA Delephone	303-384-7575	Fax 303-384-7499					
Signature Carl J. W. L.	Da	October 10, 2004					
Name Paul J. White		Registration No.					

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.